

# **2030 Metropolitan Transportation Plan (MTP)**

**for the Albuquerque Metropolitan Planning Area (AMPA)**

Adopted by the  
Metropolitan Transportation Board  
April 26, 2007



# 2030 Metropolitan Transportation Plan (MTP)

for the Albuquerque Metropolitan Planning Area (AMPA)

## Metropolitan Transportation Board (MTB)

Mid-Region Metropolitan Planning Organization (MPO)

Lawrence Rael, Executive Secretary

## Contributing MPO Staff

Shohreh Day, GIS/Systems Analyst

Carol Earp, GIS Analyst/Cartographer

Carol Foster, Research Analyst

Jack A. Lord, AICP, Transportation Program Manager

Nathan P. Masek, AICP, Transportation Planner

Rodolfo Monge-Oviedo, AICP, Transportation Planner

Dave Pennella, Senior Transportation Planner

Diane Scena, Trails Planner

Mark A. Sprick, AICP, Transportation Planning Manager

Barbara Thomas, Secretary-Transportation/Water

Kendra Watkins, Transportation Planner

Eric Webster, Transportation Planner

## Special Thanks to MRCOG Staff for Providing Data, Support and Planning Coordination

Michael Baca, Computer Specialist

Chris Blewett, Director of Transportation and Planning Services

Sheila ter Bruggen, Communications Coordinator

Ted Gaudette, Information Systems Officer

Robert Gonzales, New Mexico Rail Runner Express Operations Manager

Augusta Meyers, Marketing/Communication Manager

Nicole Ortiz, Secretary/Receptionist

Joe Quintana, AICP, Regional Planning Manager

Bruce Rizzieri, Regional Transit Manager

Tony Sylvester, AICP, Special Projects Planner

Loretta Tollefson, AICP, Special Projects Manager-Mid-Region Rural Transportation Planning Organization

## Special Thanks to the MRCOG Traffic Counter Staff for Providing Support to this MTP

### *The Unsung Heroes of our Traffic Data Support Efforts*

Samuel Garcia, Traffic Counting Aide

Amelia Handrich, Traffic Counting Aide

Mary Martinez, Traffic Counting Aide

Michael Roman, Traffic Counting Technician

Greg Salazar, Traffic Counting Aide

Special Thanks to these Boards, Committees, and Agencies for Providing Information and Comments

New Mexico Department of Transportation District 3  
ABQ Ride  
MPO Member Governments  
Public Involvement Committee (PIC)  
Transportation Coordinating Committee (TCC)  
2030 MTP Work Group – The Transportation Program Task Group (TPTG)  
Transportation Conformity Technical Committee  
Albuquerque/Bernalillo County Air Quality Control Board  
City of Albuquerque Environmental Health Department

**And finally,  
but most of all,  
a very special thanks  
to all the people in our metropolitan area  
who participated in the development of this plan!**



*The MTP Work Group, June 2006*

April 27, 2007

Dear Resident,

Following a rigorous process of analysis, evaluation, public involvement and discussion, the Metropolitan Transportation Board is pleased to present this document as the 2030 Metropolitan Transportation Plan (MTP) for the Albuquerque metropolitan planning area.

The purpose of the MTP is to evaluate what the transportation system is like now, examine where and how we're likely to grow as an area, and determine what our transportation system should look like in the future. As the metropolitan planning organization for the area, the Metropolitan Transportation Board is responsible for developing a new MTP every four years.

The 2030 MTP identifies the transportation projects that are expected to be built between now and 2030, given the revenues we can reasonably expect at the Federal, State and local levels.

Highlights of the 2030 MTP include:

- Doubling of the number of miles of bicycle and pedestrian paths and trails
- Reconstructing the I-25 / Paseo del Norte Interchange
- Incorporation of the Intelligent Transportation System (ITS) plan and updated ITS Architecture and Maintenance Plans
- Extended Rail Runner Express commuter rail transit service to Santa Fe, new Rail Runner stations, and identified high capacity transit corridors
- A study corridor in Los Lunas / Valencia County for a potential new interchange at I-25 and river crossing
- New elements of the MTP related to pedestrian facilities, safety, transportation security, and alternative fuels ensuring that this MTP is fully compliant with the new federal planning rules from the recent federal SAFETEA-LU transportation law

Development of this MTP ended with approval by the Metropolitan Transportation Board on April 26, 2007. However, transportation planning in the urban area is a continuous process. If you would like more information about specific projects, the transportation planning process or some aspect of the MTP itself, please do not hesitate to contact the MPO staff.

Sincerely,

Larry Abraham  
Chair, Metropolitan Transportation Board



# 2030 Metropolitan Transportation Plan (MTP)

for the Albuquerque Metropolitan Planning Area

## Contents

<b>1. Introduction.....</b>	<b>1-1</b>
A. Purpose of the MTP .....	1-1
B. Federal Requirements and Guidelines.....	1-1
<b>2. Our Metro Area Today and Tomorrow .....</b>	<b>2-1</b>
A. Demographics.....	2-2
1. Population Density.....	2-3
2. Population Growth .....	2-3
3. Housing Growth.....	2-5
B. Land Use .....	2-5
1. Land Area Consumed.....	2-8
2. Jobs-Housing Balance.....	2-8
C. The Economy .....	2-9
1. Employment by Sector.....	2-9
2. Employment Centers.....	210
3. Housing Construction and Sales.....	2-13
D. Commuting.....	2-14
1. Origins and Destinations .....	2-14
2. Mode Choice and Travel Times .....	2-15
E. Projected Regional Growth.....	2-16
F. Existing Plans .....	2-24
<b>3. Transportation Challenges .....</b>	<b>3-1</b>
A. Past and Near-term Transportation System.....	3-1
B. Traffic Volumes and Vehicle Miles of Travel (VMT) .....	3-1
C. Volume-to-Capacity Analysis .....	3-4
D. Travel Time, Speed, and Stop Delay.....	3-8
E. Travel Time Contour Analysis.....	3-8
F. Stop Delay .....	3-9
G. Roadway Lane Mileage .....	3-17
H. Pavement Management System within the AMPA.....	3-17
I. Congestion Management Process (CMP).....	3-19
<b>4. Mission and Goals .....</b>	<b>4-1</b>
A. Mission Statement.....	4-1
B. Goals .....	4-1
<b>5. Roadway .....</b>	<b>5-1</b>

<b>6. Public Transportation.....</b>	<b>6-1</b>
A. Air Travel .....	6-1
1. Albuquerque Sunport .....	6-1
2. Double Eagle II Airport .....	6-3
3. Mid-Valley Airpark.....	6-4
4. Sandia East Airpark .....	6-5
5. Sandoval County Airport Feasibility Study .....	6-5
B. Intermodal Connectivity.....	6-6
C. Intercity and Regional Surface Transportation.....	6-7
1. Intercity Long Distance Rail: Amtrak .....	6-7
2. Commuter Rail: New Mexico Rail Runner Express .....	6-8
3. New Mexico Park & Ride.....	6-11
4. Intercity Long Distance Bus Service.....	6-12
D. Metropolitan Area Transit .....	6-14
1. City of Albuquerque Transit—ABQ Ride.....	6-14
2. Los Lunas Transit .....	6-21
3. Pueblo of Laguna—Shâ'a'srk'a Transit .....	6-22
4. Rio Rancho High Capacity Transit Feasibility Review.....	6-22
5. Sandoval Easy Express .....	6-22
6. Santa Ana Pueblo Transit Proposal.....	6-23
7. Torrance County Project Office TOGO Transit.....	6-23
8. Town of Bernalillo Transit Feasibility Review.....	6-23
E. High Capacity Transit Corridors.....	6-24
F. Federal Funding for Transit Services .....	6-28
G. Human Services Transportation .....	6-28
H. Specialized Transit Services.....	6-31
1. Public School Transportation.....	6-31
2. Vanpool Services.....	6-32
3. Carpooling and Rideshare .....	6-33
4. Commuter Choice Program .....	6-33
I. Metropolitan Approach to Public Transportation .....	6-34
<b>7. Bicycle .....</b>	<b>7-1</b>
A. Introduction .....	7-1
B. Background .....	7-1
C. Issues.....	7-2
D. Planning .....	7-2
1. Existing Plus Committed .....	7-4
2. The 2030 MTP Bikeway Projects .....	7-4
3. The Long Range Bikeway System Map .....	7-4
4. The City of Albuquerque's TDM Program .....	7-7
<b>8. Pedestrian.....</b>	<b>8-1</b>
A. Introduction .....	8-1
B. Background .....	8-2

C. Pedestrian Planning .....	8-3
1. MRCOG's Pedestrian Composite Index (PCI).....	8-3
2. Establishing Priorities.....	8-5
3. Pedestrian Issues in Policy Documents.....	8-9
4. Americans with Disabilities Act and Section 504.....	8-11
5. Proposed Pedestrian Projects and Programs .....	8-11
<b>9. Systems Management and Operations .....</b>	<b>9-1</b>
A. Intelligent Transportation Systems (ITS) .....	9-1
B. Access Management.....	9-2
1. Limited Access .....	9-2
2. Managed Lanes/High Occupancy Vehicles (HOV) .....	9-6
3. Paseo del Norte Managed Lane/HOV Preliminary Analysis.....	9-9
C. Incident Management.....	9-18
D. Special Event Traffic Management.....	9-18
<b>10. Freight and Commercial Goods .....</b>	<b>10-1</b>
<b>11. Safety .....</b>	<b>11-1</b>
A. Background .....	11-1
B. Issues.....	11-2
C. Current Conditions.....	11-3
1. Bicycle Safety .....	11-6
2. Pedestrian Safety.....	11-8
3. Truck Crashes .....	11-10
4. Transit Safety.....	11-10
5. Commuter Rail Safety .....	11-14
6. Equestrian Safety .....	11-14
<b>12. Transportation Security.....</b>	<b>12-1</b>
<b>13. Evaluation of the Transportation System .....</b>	<b>13-1</b>
A. Measures of Effectiveness .....	13-1
1. Maintain and Preserve the Existing Transportation Infrastructure .....	13-1
2. Provide the Safest Travel Possible for all Modes.....	13-3
3. Provides Choices in Access and Mobility for People and Goods.....	13-4
4. Manage the Existing Systems to Maximize our Return on Investments.....	13-5
5. Provide Transportation that Supports Local Land Use Planning, Community Goals, and the Economy .....	13-7
B. Environmental Justice.....	13-10
1. Introduction.....	13-10
2. Methodology for Estimating Population by Race and Hispanic Origin and Income .....	13-12
3. Issues from the 2025 MTP .....	13-15
4. Environmental Justice Statistics .....	13-16
C. Environmental Mitigation .....	13-16

1.	New Mexico Department of Game and Fish .....	13-17
2.	Recommendations from the New Mexico Department of Game and Fish .....	13-18
D.	Financial Analysis .....	13-18
E.	Air Quality.....	13-24
F.	Federal Planning Emphasis Areas .....	13-32
<b>14.</b>	<b>Public Participation.....</b>	<b>14-1</b>

## **Appendices**

- A – MTP Projects List by Type
- B – MTP Projects List by Lead or Sponsoring Agency
- C – MTP Projects List by Project Identification Number (PIN)
- D – MTP Projects List by Project Title
- E – MTP Major Transportation Studies List
- F – Privately-funded Transportation Projects List
- G – Equestrian Routes and Access Points Map (for information purposes only)
- H – Correspondence related to Transportation Conformity with State Implementation Plans  
for Air Quality
- I – Public Involvement Committee (PIC) Roster as of April 27, 2007
- J – List of Abbreviations used in the 2030 MTP

# MAPS

1-1 Albuquerque Metropolitan Planning Area .....	1-7
2-1 Population Density by DASZ, 2004 .....	2-4
2-2 Population Change by DASZ, 2000-2004 .....	2-6
2-3 2000 Housing Density and 2000 to 2004 Residential Permits .....	2-7
2-4 2000 Employment Density and 2000 to 2004 Job Growth .....	2-11
2-5 Employment Centers .....	2-12
2-6 Draft Population Density, 2030 .....	2-18
2-7 Draft Population Growth, 2004-2030 .....	2-19
2-8 Draft Employment Density, 2030 .....	2-21
2-9 Draft Employment Growth, 2004-2030 .....	2-22
2-10 Draft Land Use Forecast, 2030 .....	2-23
3-1 2004 Base Year PM Peak Hour Volume to Capacity Ratios .....	3-6
3-2 2015 PM Peak Hour Volume to Capacity Ratios .....	3-7
3-3 Change in PM Peak Travel Time Contours for Destination Point in Rio Rancho, 2004 Scenario .....	3-9
2015 Scenario .....	3-10
3-4 Change in PM Peak Travel Time Contours for Destination Point in Southwest Mesa, 2004 Scenario .....	3-11
2015 Scenario .....	3-12
3-5 Change in PM Peak Travel Time Contours for Destination Point in Los Lunas, 2004 Scenario .....	3-13
2015 Scenario .....	3-14
3-6 2004 Base year PM Peak Hour Average Stop Delay .....	3-15
3-7 Roadway Projects Included in the 2015 Modeled Roadway Network .....	3-18
3-8 Bicycle Travel Time Contours for the I-25/Jefferson Activity Center .....	3-22
3-9 Bicycle Travel Time Contours with Origin/Destination (O/D) Data for the I-25/Jefferson Activity Center .....	3-23
3-10 Auto Travel Time Contours for I-25/Jefferson Activity Center .....	3-26
3-11 Auto Travel Time Contours with Origin/Destination Data for the I-25/Jefferson Activity Center .....	3-27
3-12 Walk Travel Time Contours for I-25/Jefferson Activity Center .....	3-28
3-13 Walk Travel Time Contours with Origin/Destination Data for the I-25/Jefferson Activity Center .....	3-29
3-14 Walk to/from Transit—Travel Time Contours for I-25/Jefferson Activity Center .....	3-30
3-15 Walk to/from Transit—Travel Time Contours with Origin/Destination Data for the I-25/Jefferson Activity Center .....	3-31
5-1 Roadway Projects by Type, Publicly Funded, 2006-2030 .....	5-2
5-2 2030 Roadway Network Level of Service .....	5-3
5-3 The Long Range Roadway System, 2030 MTP .....	5-5
6-1 Existing Public Transportation in the AMPA—April 2007 .....	6-13
6-2 Rapid Ride Route Expansion 2007 .....	6-18
6-3 High Capacity Transit Corridors for Further Study and Review .....	6-25
6-4 Proposed Alignment of Albuquerque Modern Streetcar .....	6-27
7-1 2004 Base Year Bike Network .....	7-3

7-2 Existing Bikeway Facilities, 2006-2011 TIP Projects and 2030 Forecast Land Use .....	7-5
7-3 Existing Trails, 2006-2011 TIP Trail Projects, and Activity Centers .....	7-6
7-4 2030 MTP Bicycle and Pedestrian Projects .....	7-8
7-5 Long Range Bikeway System Map.....	7-9
8-1 Areas Ranking High in the “Pedestrian Activity Index” .....	8-6
8-2 Areas Ranking High in the “Pedestrian Deterrent Index” .....	8-7
8-3 Pedestrian Composite Index.....	8-8
8-4 Pedestrian Composite Index for the AMPA for Select Area .....	8-10
9-1 ITS Implementation Plan for the AMPA.....	9-3
9-2 Limited Access Arterials for the AMPA .....	9-6
9-3 Limited Access Arterials for the AMPA — Facilities with HOV Potential.....	9-6
9-4 Auto Travel Times for Base Scenario, General Purpose Lanes .....	9-11
9-5 Auto Travel Times for Scenario 2, Reversible General Purpose Lane .....	9-12
9-6 Auto Travel Times for Scenario 3, Reversible Lane as the Managed Lane .....	9-13
9-7 Auto Travel Times for Scenario 4, Existing General Purpose Lane is t the Managed Lane.....	9-14
9-8 Transit Travel Times for Base Scenario, Existing General Purpose Lane and no Rapid Ride.....	9-15
9-9 Transit Travel Times for Scenario 3, Reversible Lane is Managed Lane, Rapid Ride Transit.....	9-16
9-10 Transit Travel Times for Scenario 4, Existing General Purpose Lane is Managed Lane, Rapid Ride Transit .....	9-17
11-1 2001-2004 Intersections with Reported Crashes .....	11-4
11-2 2001-2004 Intersections with High Crash Rates Involving Injuries and Fatalities .....	11-5
11-3 2001-2004 Bicycle Crash Rates at Intersections.....	11-9
11-4 2001-2004 Pedestrian Crash Rates at Intersections .....	11-12
11-5 2001-2004 Heavy Truck Crash Rate .....	11-13
13-1 2004 Low Income by 2000 Data Analysis Zone (DASZ).....	13-9
13-2 2004 High Minority Population by 2000 Data Analysis Zone (DASZ) .....	13-11
13-3 2004 Minority and Low Income Population by 2000 DASZ.....	13-13

## TABLES

2-1 Population Density by Municipality, 2000-2004 .....	2-2
2-2 Population by Municipality, 2000-2004.....	2-3
2-3 Change in Land Use, 2000 to 2004 .....	2-5
2-4 Job to Housing Ratio, 2000 and 2004.....	2-8
2-5 Employment by Sector in the AMPA, 2004 .....	2-9
2-6 Existing Employment Center Statistics, 2004.....	2-13
2-7 Commuter Flows for Work Trips by Place, 2000 .....	2-15
2-8 Means of Transportation and Travel Time by Place, 2000 .....	2-16
2-9 Regional and AMPA Population, 2004 and 2030 .....	2-17
2-10 Regional and AMPA Employment, 2004-2030 .....	2-17
2-11 Land Use Changes, 2004 and 2030.....	2-20
3-1 Modeled Congestion by Roadway Type.....	3-5
3-2 Roadway Lane-Miles Programmed in the 2030 MTP .....	3-9

3-3 Centerline Mileage Breakdown by Agency and Condition .....	3-19
3-4 Sample Congested Areas and Proposed Strategies.....	3-20
3-5 Activity Center Travel Market Analysis .....	3-25
5-1 2030 Roadway System Performance.....	5-1
6-1 Federally Funded & Major Projects for Albuquerque Int'l Sunport .....	6-2
6-2 Planned MTP and TIP Projects Related to Albuquerque Int'l Sunport.....	6-3
6-3 Federally Funded & Major Projects for Double Eagle II Airport.....	6-4
6-4 Planned MTP & TIP Projects Related to Double Eagle II Airport .....	6-5
6-5 Amtrak Service: Frequency and Affordability.....	6-8
6-6 Planned MTP & TIP Projects Related to Intercity Rail.....	6-8
6-7 Rail Runner Fares .....	6-10
6-8 Planned MTP & TIP Projects Related to Commuter Rail .....	6-11
6-9 Planned MTP & TIP Projects Related to NM Park & Ride.....	6-12
6-10 ABQ Ride Comparison with Similar Size Transit Markets–2005 .....	6-15
6-11 Planned MTP & TIP Projects Related to ABQ Ride Transit Service.....	6-20
6-12 Planned MTP & TIP Projects Related to Los Lunas Transit .....	6-21
6-13 Planned MTP & TIP Projects Related to Shâa'srk'a Transit .....	6-22
6-14 Planned MTP & TIP Projects Related to Sandoval County Transit Proposals .....	6-23
6-15 Planned MTP & TIP Projects Related to Santa Ana Pueblo Transit Proposals .....	6-23
6-16 Planned MTP & TIP Projects Related to Albuquerque Modern Streetcar.....	6-27
6-17 Planned MTP & TIP Projects Related to Rio Metro.....	6-30
6-18 SECA Ridership.....	6-33
6-19 Planned MTP & TIP Projects Related to Transportation Demand Management.....	6-35
6-20 Planned MTP & TIP Projects Related to the Mid-Region Transit District.....	6-35
7-1 Number of Bikeway Miles by Functional Class.....	7-2
8-1 Pedestrian Activity Index & Pedestrian Deterrent Index Element Ranking.....	8-4
8-2 Pedestrian Composite Index.....	8-5
8-3 Pedestrian Policy Review.....	8-12
9-1 ITS Implementation Plan, Stage I Deployment .....	9-4
9-2 ITS Implementation Plan, Stage II Deployment .....	9-5
9-3 ITS-Specific Projects Submitted for Inclusion in the MTP .....	9-6
9-4 Paseo del Norte HOV/Managed Lanes Preliminary Analysis Results .....	9-10
11-1 AMPA Crash Data by Severity .....	11-1
11-2 AMPA AM Peak Period Crash Data by Severity .....	11-1
11-3 AMPA PM Peak Period Crash Data by Severity.....	11-1
11-4 AMPA PM Peak Period Crash Data by Severity.....	11-3
11-5 Intersections with Highest Fatal Crash Rates and Injuries.....	11-6
11-6 Bike Crash Data by Severity for AMPA .....	11-7
11-7 AMPA AM Bike Crash Data by Severity .....	11-7
11-8 AMPA PM Bike Crash Data by Severity.....	11-7
11-9 AMPA Bike Crash Data 2001-2004.....	11-8
11-10 AMPA Pedestrian Crash Data by Severity.....	11-10
11-11 AMPA AM Pedestrian Crash Data by Severity.....	11-10
11-12 AMPA PM Pedestrian Crash Data by Severity .....	11-10
11-13 Top 10 Pedestrian Crash Locations, 2004.....	11-11
11-14 AMPA Heavy Truck Crash Data by Severity .....	11-11

11-15 AMPA AM Heavy Truck Crash Data by Severity .....	11-11
11-16 AMPA PM Heavy Truck Crash Data by Severity .....	11-11
11-17 AMPA Pedestrian Crash Data 2001-2004 .....	11-15
12-1 Scenarios Considered in the USDOT Vulnerability Assessment .....	12-2
12-2 Possible MPO Roles in Security/Disaster Incident Stages .....	12-4
13-1 Anticipated Jobs/Housing Ratios by Sub Area Within the AMPA .....	13-6
13-2 AMPA 2000 Census Counts for Race and Hispanic Origin by Age.....	13-10
13-3 AMPA Estimated Change 2000-2004.....	13-10
13-4 Mode of Transportation to Work by Race and Hispanic Origin .....	13-14
13-5 Travel Time to Work by English and Spanish Speaking Ability.....	13-14
13-6 Model of Transportation to Work by Income.....	13-14
13-7 Mode of Transportation to Work by Age .....	13-15
13-8 Privately Funded Capital Projects.....	13-18
13-9 Financial Reconciliation .....	13-19
13-10 Revenues from Public Sources.....	13-19
13-11 Expenditure Summary .....	13-19
13-12 Capital Expenditures by Project Type .....	13-20
13-13 Capital Expenditures by Lead Agency .....	13-21
14-1 ☒ MPO Meetings Where the MTP was Discussed .....	14-2
14-2 Neighborhood Association and Community Group MTP Meetings.....	14-3

## **FIGURES**

2-1 Residential Building Permits, 1990-2004 .....	2-14
2-2 Place of Work, 2000 .....	2-15
3-1 Trend in Vehicle Miles Traveled (VMT) Per Capita .....	3-2
3-2 Historical Growth in River Crossing Volumes .....	3-2
3-3 Historical Growth at Big-I .....	3-3
3-4 Average Daily Distribution of Roadway Volumes .....	3-3
3-5 PM Peak Distribution of Roadway Volumes, Percentage of Daily .....	3-3
3-6 Typical Pavement Preservation Curve with Relation Between Timely Management and Optimal Roadway Preservation .....	3-17
11-1 Total Bike Crashes 2001, 2002, 2003, and 2004.....	11-7
11-2 Pedestrian Crashes, 2001,2002,2003, and 2004 .....	11-10
13-1 Public Funds for Capital Projects and O&M, 2006-2030 .....	13-1
13-2 Type of Projects in the MTP by Lane Miles Affected .....	13-1
13-3 Centerline Miles of Bicycle Facilities, by Facility Type.....	13-2
13-4 AMPA Crash Rates and Fatality Rates .....	13-3
13-5 AMPA Population/Employment Accessibility to Bicycle Lanes and Trails .....	13-4
13-6 Anticipated Growth in Developed Land and Housing.....	13-6
13-7 Projected Growth of Daily VMT and AMPA Population, 2004-2030.....	13-7
13-8 AMPA Growth in VHT, Employment, and Population .....	13-7
13-9 Operations and Maintenance Expenditures by Type .....	13-20
13-10 Capital Expenditures by Project Type .....	13-20
13-11 Capital Expenditures by Lead Agency .....	13-24
13-12 Ozone Data, 1995-2005 .....	13-32